UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,534	11/01/2001	Tae-Sung Jung	678-768(P9939)	3265

28249 7590 08/10/2005

DILWORTH & BARRESE, LLP
333 EARLE OVINGTON BLVD.
UNIONDALE, NY 11553

EXAMINER	
BLAIR, DOUGLAS B	
ART UNIT	**PAPER NUMBER**
2142	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/002,534	JUNG, TAE-SUNG	
	Examiner	Art Unit	
	Douglas B. Blair	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/5/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1-8 are currently pending in this application. Claims 9-18 have been cancelled.

The corrections to the drawings are accepted by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,738,362 to Xu et al..

4. As to claim 1, Xu teaches a system for providing a VPN (Virtual Private Network) service by connecting a VPN to a mobile communication network, comprising: a home agent (HA) for storing location information of a mobile node (MN) and information about the VPN service for the MN (col. 5, line 57-col. 6, line 26); a foreign agent (FA) for reciving location registration information from the MN (col. 6, lines 37-40), transmitting a location registration request message to the HA (col. 6, lines 37-40), and transmitting data to an ISP (Internet Service Provider) router of an FA network, when receiving a VPN service request (col. 6, lines 27-48); an ISP server for IP tunneling between the ISP router of the FA network and an ISP router of the VPN (col. 8, line 57-col. 9, line 23); a router network for routing the FA network and the VPN,

and receiving and forwarding the data using an IP tunnel to a correspondence node (col. 8, line 57-col. 9, line 23); and a VPN server for providing the VPN service (col. 6, line 63-col. 7, line 12).

5. As to claim 2, Xu teaches the system as claimed in claim 1, wherein the router network includes a server for searching an edge Internet Protocol (IP) router in the network using an address of the FA (col. 6, lines 27-48).

6. As to claim 3, Xu teaches the system as claimed in claim 1, wherein the HA prevents the MN from accepting a call request received from a specific node in an IP network while the MN is performing the VPN service (col. 8, lines 3-20).

7. As to claim 4, Xu teaches a system for providing a Virtual Private Network (VPN) service by connecting a VPN to a mobile communication network, comprising: a home agent (HA) for storing location information of an mobile node (MN) and information about the VPN service for the MN (col. 5, line 57-col. 6, line 26); a foreign agent (FA) for receiving location registration information for the MN, transmitting a location registration request message to the HA, transmitting data to an Internet Service Provider (ISP) router of an FA network, when a VPN service request, and performing Internet Protocol (IP) communication with a specific subscriber (col. 6, lines 27-48); the MN for performing the Internet Protocol (IP) communication with the FA, the MN being registerable in the VPN (col. 6, line 63-col. 7, line 12); an ISP server for IP tunneling between the ISP router of the FA network and an ISP router of the VPN (col. 8, line 57-col. 9, line 23); a router network for routing the FA network and the VPN, and receiving and forwarding the data using an IP tunnel to a correspondence node (col. 8, line 57-col. 9, line 23); and a VPN server for providing the VPN service (col. 6, line 63-col. 7, line 12).

8. As to claim 5, Xu teaches the system as claimed in claim 4, wherein the router network includes a server for searching an edge IP router in the network using an address of the FA (col. 6, line 63-col. 7, line 12).

9. As to claim 6, Xu teaches the system as claimed in claim 4, wherein the HA prevents the MN from accepting a call request received from a specific node in an IP network while the MN is performing the VPN service (col. 8, lines 3-20).

10. As to claim 7, Xu teaches the system as claimed in claim 4, wherein the MN transmits an address of the HA and an address of the VPN server to the FA during VPN registration, and performs the VPN service by receiving a temporary ID for use of the VPN from the FA during the location registration (col. 6, lines 27-48).

11. As to claim 8, Xu teaches the system as claimed in claim 7, wherein the MN stores an address of the VPN server and an address of a router in the network, received from the FA, and performs the VPN service using the received addresses (col. 8, lines 3-20).

12. As to claim 9, Xu teaches a method for providing a Virtual Private Network (VPN) service to a mobile node (MN) located in a foreign agent (FA) area connected to the MN, comprising the steps of: upon receiving a location registration request message for the VPN service from an FA, storing an address of the FA connected to the MN (col. 5, line 57-col. 6, line 26); transmitting a location registration request signal to a requested VPN server (col. 5, line 57-col. 6, line 26); and upon receiving a reply signal in response to the location registration request signal, blocking an Internet service and transitioning to a VPN service state (col. 6, line 63-col. 7, line 12).

13. As to claim 10, Xu teaches the method as claimed in claim 9, further comprising the step of transmitting a location registration failure message for the VPN service upon failure to receive the reply signal within a predetermined time after transmitting the location registration request signal (col. 5, line 57-col. 6, line 26).

14. As to claim 11, Xu teaches a method for providing a Virtual Private Network (VPN) service to an mobile node (MN) located in a foreign agent (FA) area connected to the MN, comprising the steps of: upon receiving a location registration request signal for the VPN service from the MN, storing an address of the home agent (HA) and an address of the VPN, and transmitting a location registration request message to the HA by analyzing the address of the HA (col. 5, line 57-col. 6, line 26); upon receiving a location registration authentication signal from the HA, storing an address of a router in. an Internet Protocol (IP) network connected to a VPN server (col. 6, lines 27-48); transmitting a location registration reply message to the M.N that has transmitted the location registration request signal for the VPN service (col. 5, line 57-col. 6, line 26); and upon receiving a VPN service request from the MN, controlling a service process (col. 6, lines 27-48).

15. As to claim 12, Xu teaches the method as claimed in claim 11, wherein the step of: controlling the service process comprises the steps of: upon receiving a VPN service request, transmitting a service request signal to an IP network router of the FA (col. 5, line 57-col. 6, line 26); and upon receiving a service reply signal from the IP network router, determining whether the VPN service is available; and forming, if the VPN service is available, a channel to the MN and performing the VPN service (col. 6, lines 27-48).

16. As to claim 13, Xu teaches a method for providing a Virtual Private Network (VPN) service in an mobile node (MN), comprising the steps of: upon receiving a VPN service request, creating a location registration request signal for the VPN service, the signal including an address of a HA and an address of a VPN server, and transmitting the created location registration request signal for the VPN service (col. 5, line 57-col. 6, line 26); upon receiving a location registration reply signal for the VPN service, determining whether a VPN-ID is included in the received location registration reply signal for the VPN service (col. 6, lines 27-48); and if the VPN-ID is included in the received location registration reply signal for the VPN service, storing the VPN-ID, and upon receiving the VPN service request establishing a channel using the VPN-ID and exchanging data and a voice signal through the channel (col. 6, lines 27-48).

17. As to claim 14, Xu teaches a method for providing a Virtual Private Network (VPN) service in a mobile node (MN) having a mobile IP at a VPN server, the method comprising the steps of: upon receiving a VPN service availability confirm signal from a foreign agent (FA) to which the MN belongs, checking both whether the MN is in condition of registration or not and whether VPN service is available or not (col. 5, line 57-col. 6, line 26); storing a FA address in which the MN is located if the MN is registered and VPN service is available; creating VPN service availability message for transmitting the MN and transmitting the created message to the FA (col. 6, lines 27-48).

18. As to claim 15, Xu teaches the method as claimed in claim 14, further comprising the step of; activating a timer for the purpose of placing a time restriction in storing the FA address (col. 6, lines 27-48); and upon completion of timer activation, deleting the FA address (col. 6, lines 27-48).

19. As to claim 16, Xu teaches a method for providing a Virtual Private Network (VPN) service in a home agent (HA) including a mobile node (MN) having a mobile-IP, the MN is available for VPN service, the method comprising the steps of: upon receiving a VPN registration request signal, storing a foreign agent (FA) address in which the MN is located and creating a service availability inquiry message from a Internet Service Provider (ISP) router connected to a VPN server to transmit the created message (col. 5, line 57-col. 6, line 26); and upon receiving a VPN service availability confirm signal from the ISP router, creating the VPN service availability message in accordance with the received VPN service availability confirm signal and transmitting the created message (col. 6, lines 27-48).

20. As to claim 17, Xu the method as claimed in claim 16, wherein the VPN service availability inquiry message includes data of the MN and the FA address (col. 6, lines 27-48).

21. As to claim 18, Xu teaches the method as claimed in claim 16, further comprising the step of activating a time for a predetermined time period in case that VPN service is available and performing a VPN service mode (col. 6, lines 27-48).

Response to Arguments

22. Applicant's arguments filed 5/16/2005 have been fully considered but they are not persuasive. The applicant argues the following points: (a) Xu does not disclose storing the VPN service desired by the MN; and (b) Xu does not use a tunnel that is made when it is needed but simply transmits data through a tunnel already made.

23. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., storing a VPN

desired by an MN and creating a tunnel when needed only) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B. Blair whose telephone number is 571-272-3893. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Blair
DBB

KAMINI SHAH
PRIMARY EXAMINER